

## RS-01 Ayrton Senna 1993 McLaren MP4/8 parts list

This car honors arguably the greatest Formula One driver ever, three-time champion Ayrton Senna, and his iconic 1993 McLaren MP-4/8 which drove under both the McLaren/Marlboro red and white livery. If you never heard of Ayrton Senna I highly recommend watching the documentary \*Senna\* (also check out the movie \*Amy\* by the same director)—it's an amazing story of an amazing man who inspired the nation of Brazil and the world with his amazing driving. You can also watch this quick clip that Top Gear did two years ago about Senna <https://vimeo.com/89217406>.

I always loved this car. It is completely new car, an evolution of the RS-01 chassis that I built last month—this is the first unique car to emerge from the RS-01 chassis family and the first to be released... Being that it's Senna's car, I'm sure it will be outstanding in the rain, and do unworldly pole qualifying laps. .

RS-01 chassis information can be found here: <http://www.thingiverse.com/thing:1420189>

I loved making this car; I hope that you enjoy printing, building, and driving it just as much.

-Brett Turnage  
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### Parts:

Decorations:

Stickers: <http://www.rc-expert.com/110-1984-1985-1988-1991-f1-champ-mclaren-senna-mp42b-4-5b-6-7-8-decal-sticker-rc-body-sr036-p-5062.html>

Helmet (if using body): <http://www.ebay.com/itm/1-10-Prepainted-F1-Driver-Helmet-fr-RC-Car-Ayrton-Senna-Mclaren-Honda-Mp4-4-5-6-/361495660967>

Rainlight: 5mm Flash LED light – Red (F1 Tail Light) [https://www.tqrcracing.com/shop/product\\_view.asp?p\\_id=1800](https://www.tqrcracing.com/shop/product_view.asp?p_id=1800)

Mechanical Parts needed:

Tamiya F104 C Parts 51379 (motor mounts and rear diffuser)

Tamiya F104 54158 (Aluminum Diff Housing set)  
F104 rear shaft--- they come in aluminum, steel, and carbon fiber  
    I choose carbon fiber Tamiya 54162  
Tamiya wheel stopper 58431  
Motor bearing holders--- multiple options  
    I purchased 3Racing F109-01 ... it had multiple sizes and a spacer for the left side wheel that is needed.  
Tamiya Front uprights--- again there are many choices  
    I choose the Carbon Reinforced Uprights 54154  
(4) 1050 Ball bearings for front wheels  
Gears— many different choices and brands  
    I choose F1 Machined spur gear 93T 64 Pitch  
    Robinson Racing Pinion 64P 23T  
Differential Balls... many choices  
    Cheapest one is 3racing 3RB-B30  
F104 wheels and tires--- multiple choices and rubber compounds  
    I choose Taimya F104 Mesh Wheels for Rubber tires 51398  
    51400 F104 Rubber Tires Rear  
    54198 F104 Rubber Front tires Hard compound

all of my parts were purchased from TQRCracing [www.tqrcracing.com](http://www.tqrcracing.com)

**If anyone needs a bolt kit assembled please contact me, I will make it available on my website store**  
[www.btifab.com](http://www.btifab.com)

## **II. PARTS THAT BOTH VERSIONS REQUIRE**

### **Required tools**

2.30mm drill bit  
m3 drill bit  
m3x1.0mm tap for open holes  
m8 drill bit (can use 5/16 if you do not have a m8)  
Tap wrench  
Metric Allen wrenches  
2 pieces of wood, flat and something that you can push your weight on, so it must be sturdy.  
Medium sized pliers

Needle nose pliers

### A. Shocks

front: (2) 55mm shocks with (2) 65mm m3x65 turnbuckles.  
rear: (2) 55mm shock, springs removed for damper and 7x19mm spring (I cut a spring down to 19mm). You can choose your spring rate to find the correct spring for your application.

### B. Front Assembly Parts

Left and Right Lower A-arms

Left and Right upper A-arms

Left and Right Rocker Arms

Left and Right Spindles and axles (if Printed car)

F109 front uprights (if using building the F109 version)

(3) m4x12 spacers

(10) m3x10 set screws

(3) Aluminum Unthreaded Spacers 6mm OD, 5mm Length, for M4 screw size

(2) countersunk washers for m3 (there are a variety of colors available [http://](http://www.tqrcracing.com/shop/product_list.asp?p_id=&s_cate_id=&s_maker_id=&s_sort=3&p_keyword=countersunk&pg_no=2&o_pg_no=1)

[www.tqrcracing.com/shop/product\\_list.asp?](http://www.tqrcracing.com/shop/product_list.asp?p_id=&s_cate_id=&s_maker_id=&s_sort=3&p_keyword=countersunk&pg_no=2&o_pg_no=1)

[p\\_id=&s\\_cate\\_id=&s\\_maker\\_id=&s\\_sort=3&p\\_keyword=countersunk&pg\\_no=2&o\\_pg\\_n](http://www.tqrcracing.com/shop/product_list.asp?p_id=&s_cate_id=&s_maker_id=&s_sort=3&p_keyword=countersunk&pg_no=2&o_pg_no=1)

[o=1](http://www.tqrcracing.com/shop/product_list.asp?p_id=&s_cate_id=&s_maker_id=&s_sort=3&p_keyword=countersunk&pg_no=2&o_pg_no=1)

I choose purple [https://www.tqrcracing.com/shop/product\\_view.asp?p\\_id=6709](https://www.tqrcracing.com/shop/product_view.asp?p_id=6709)

(4) 5x8x2.5mm bearings

(2) m3x14 flat screws

(3) m3x30 flat screws

(3) m3 nuts

(2) m3 nylock nuts

(2) m3x30 bolts

(2 packages of 12) Team Associated 6271 Short Ball End Set [will use 16]

(1 package of 6) Traxxas 2742X Short Rod Ends Ball Connector [will use 4]

(2) spacers m3x3.2 ID x4.5 od <http://www.mcmaster.com/#92871A171>

(2) M3 threaded rod cut to desired length of the shocks that you are using

### C. Battery Box

Printed battery box

Battery box front

Battery box middle  
Battery box rear  
Damper mount  
Triple shock mount  
(8) m3x10 flat screws

#### D. Rear Suspension

Rear chassis bottom (choose between which rear axle you are using)

\*Chassis rear for Printed axle parts.

\*F109 Chassis rear bottom if using Tamiya F109 Rear axle parts.

Rear engine lid

\*Rear lid for standard OpenRC F1 motor mounts

\*F109 motor cover if using F109 motor mounts

Left and Right Spring Damper mount

Rear shock mount

Motor mounts

\*Stock OpenRC F1 printed parts (axle, gears, wheels)

\*F109 rear plastic parts

(2) Rear shock tower

(1 pack) of Yokomo Rear side roll springs (YOKR12-21SH) \* can use different brand if you choose

(2) Yokomo Roll Spring Holder (YOKR12-21) \*

(6) Team Associated Ball and socket nuts

(2) m3x35mm rod ends/turnbuckles

(8) m3x10 flat screws

(4) m3x1.0 nuts

#### E. Steering

printed servo mount

(2) m3x30 screws

18 gauge steel wire

servo arm (I used Hitec RCD 55701 Standard Aluminum Servo Arm)

#### F. Wing and Rain light

(2) m4x3 aluminum spacers to stand off the wing from the motor mounts.

(2) m3x30 screws to mount the